

Tuesday, July 10, 2018 3:00 p.m. Library, Virginia Air and Space Center Meeting Summary

The Joint Commission on Technology and Science (JCOTS) held its second meeting of the 2018 interim on Tuesday, July 10, at the Virginia Air and Space Center in Hampton. Delegate Glenn Davis, vice-chairman of JCOTS, called the meeting to order.

The meeting began with a presentation by Tom Flake of Bcause, a company that owns server farms, or data centers, for the purpose of mining cryptocurrency. "Mining" is the term used to describe the validation of cryptocurrency transactions and their addition to the distributed blockchain ledger. Each time a computer on the cryptocurrency network mines a transaction, it earns the owner a small amount of cryptocurrency for the owner's effort. Mr. Flake said that the new facility his company is building will be the largest of its kind in North America and the fifth largest in the world; it will employ around 100 people. His presentation focused on how Virginia could capitalize on the emerging cryptocurrency mining industry.

Since the industry is transacted completely online, such data centers may locate in any state. One main factor in deciding where to locate data centers is the cost of electricity and the ability for owners to choose electricity providers Mr. Flake asserted that electric utility rates in Pennsylvania are 30 percent cheaper than in Virginia and, moreover, that an individual user in Virginia may choose its electricity supplier or develop its own energy source only if it uses more than five megawatts annually. These factors pose problems if Virginia wants to attract new data centers.

Delegate Ken Plum asked why it has been portrayed to members of the General Assembly that Virginia has the cheapest energy rates in the Southeast. Mr. Flake's response was that while Virginia has relatively cheap rates, additional riders and fees on bills greatly increase the overall cost of electricity. Furthermore, while it may be a good thing to be the cheapest in a region, it does not matter when a data center is just as valuable in any other region or in Canada. Hence the next two data centers for Bcause will not be in Virginia. As a result, the committee expressed interest in bringing Dominion Energy to talk about the issue.

Delegate Mark Sickles stated that it would be a bad precedent to exclude certain specific commercial companies from energy regulations. Mr. Flake responded that he believes Dominion agrees because the utility is suing Wal-Mart to prevent the company from contracting with a competing energy supplier.

In conclusion, Mr. Flake explained that the server farm and data center industry and the underlying blockchain technology is at a stage at which it is focusing on converting existing industries to use new technology. He compared the current status of the industry to that of the tech boom in 1996 and named transactors and middlemen, ports and shipping companies, the



insurance industry, and any entity that keeps track of ownership as examples of industries that blockchain technology can improve.

Following Mr. Flake's presentation, Delegate Davis announced the creation of a new subcommittee based on HJR 53 and composed of JCOTS members that will attempt to find opportunities to use blockchain technology in government agencies. The subcommittee membership is Delegate Sickles, Delegate Filler-Corn, Senator Cosgrove, Senator Dunnavant, and Delegate Davis, who will serve as the chair. The first meeting will be held in late August.

As there were no further agenda items and no public comments, the meeting was adjourned.